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Influenza Vaccines Available During the 2023–24 Season

Vaccines Available

Influenza vaccine options available in the United States this season include Afluria®, Fluarix®, FluLaval®, Fluzone®, Flucelvax®, Fluzone High-Dose®, Fluad®, Flublok®, and FluMist®.¹ The Alaska Immunization Program will supply 7 presentations of quadrivalent influenza vaccine this season (Table). Recommendations and administration information is published in a separate *Bulletin*.²

2023–24 Influenza Vaccine Composition¹

Egg-based influenza vaccines contain hemagglutinin (HA) derived from:

- influenza A/Victoria/4897/2022 (H1N1) pdm09-like virus
- influenza A/Darwin/9/2021 (H3N2)-like virus
- influenza B/Austria/1359417/2021 (Victoria lineage)-like virus
- influenza B/Phuket/3073/2013 (Yamagata lineage)-like virus

Cell culture-based (ccIIV4 and RIV4) influenza vaccines contain HA derived from:

- influenza A/Wisconsin/67/2022 (H1N1) pdm09-like virus
- influenza A/Darwin/6/2021 (H3N2)-like virus
- influenza B/Austria/1359417/2021 (Victoria lineage)-like virus
- influenza B/Phuket/3073/2013 (Yamagata lineage)-like virus

Storage

All influenza vaccine should be stored at 36°–46°F (2°–8°C) and should not be frozen.¹ Multidose vials should not be used after the beyond-use date after being accessed for the first dose.¹ Additional storage and handling guidelines are available on the vaccine package inserts.³

Inactivated Influenza Vaccines (IIV)

The IIV vaccines available this season are:

- Egg-based (IIV4): Afluria® MDV, Fluarix®, FluLaval®, and Fluzone® are licensed for persons aged ≥6 months.³
- Cell culture-based (ccIIV4): Flucelvax® is licensed for persons aged ≥6 months.³
- Egg-based high dose (HD-IIV4): Fluzone High-Dose® is licensed for persons aged ≥65 years.³
- Egg-based with MF59 adjuvant (aIIV4): Fluad® is licensed for persons aged ≥65 years.³

Recombinant Influenza Vaccine (RIV)

Flublok® (RIV4) contains recombinant HA produced in an insect cell line using genetic sequences from cell-derived influenza viruses. Flublok® (RIV4) may be used in persons aged ≥18 years.³

Live-Attenuated Influenza Vaccine (LAIV)

FluMist® (LAIV4) contains live, attenuated viruses that only replicate efficiently at temperatures present in the nasal mucosa. If the recipient sneezes immediately after administration, the dose should not be repeated.¹ FluMist® (LAIV4) is available for persons aged 2 through 49 years who are NOT pregnant.¹

References

1. CDC. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the ACIP — United States, 2023–24-Influenza Season. *MMWR* 2023;72(2);1–25. Available at: https://www.cdc.gov/mmwr/volumes/72/rr/rr7202a1.htm?s_cid=rr7202a1_w
2. Alaska Epidemiology *Bulletin*. “Influenza Vaccine Recommendations and Administration for the 2023–24 Season”. No. 12, August 30, 2023. Available at: https://epi.alaska.gov/bulletins/docs/b2023_12.pdf
3. U.S. Food and Drug Administration, Vaccines, Blood, and Biologics: Manufacturer Package Inserts. Available at: <https://www.fda.gov/vaccines-blood-biologics/vaccines/vaccines-licensed-use-united-states>

Table. Alaska Immunization Program Supplied Influenza Vaccines

Trade Name	Manufacturer	Presentation	Age Indication	HA (IIVs/RIV4) or virus count (VAIV4) per dose	Route	Mercury (from thimerosal)
Standard dose, egg based (IIV4)						
Afluria®	Seqirus	5.0 mL MDV	6–35 months ≥3 years	7.5 µg/0.25 mL dose 15 µg/0.5 mL dose	IM	24.5 µg/0.5 mL
Fluarix®	GlaxoSmithKline	0.5 mL PFS	≥6 months	15 µg/0.5 mL dose	IM	--
Fluzone®	Sanofi Pasteur	5.0 mL MDV*	≥6 months	15 µg/0.5 mL dose	IM	25 µg/0.5 mL
Standard dose, cell culture based (ccIIV4)						
Flucelvax®	Seqirus	0.5 mL PFS	≥6 months	15 µg/0.5 mL dose	IM	--
High dose, egg based (HD-IIV4)						
Fluzone HD®	Sanofi Pasteur	0.7 mL PFS	≥65 years	60 µg/0.7 mL dose	IM	--
Standard dose, egg-based vaccine with MF59 adjuvant (aIIV4)						
Fluad®	Seqirus	0.5 mL PFS	≥65 years	15 µg/0.5 mL dose	IM	--
Egg based (LAIV4)						
FluMist®	AstraZeneca	0.2 mL PFIS	2–49 years	10 fluorescent focus units/0.2mL	NAS	--

Abbreviations: IIV = inactivated influenza vaccine; RIV = recombinant influenza vaccine; LAIV = live attenuated influenza vaccine; cc = prefix indicating cell culture-based vaccine; a = prefix indicating adjuvanted inactivated vaccine; numeric suffix = specifies number of HA antigens in the vaccine; IM = Intramuscular; MDV = Multi-Dose Vial; NAS = Nasal; PFS = Pre-Filled Syringe; PFIS = Pre-Filled Intranasal Spray

*Fluzone® is currently approved for ages 6 through 35 months at either 0.25 mL or 0.5 mL per dose.